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Arms Control and the New Revolution in Soviet Military Affairs

by

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A Division of



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CENTER FOR NAVAL ANALYSES

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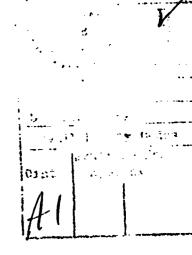
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Throughout the last decade, the Soviet politico-military leadership has provided startling evidence of a new Soviet doctrine on nuclear and conventional wars. Leading Soviet military thinkers have themselves used provocative language to describe these new developments. In his 1982 book--Always in Readiness to Defend the Fatherland, hereafter cited as Always -- Marshal N. V. Ogarkov argued that "[a] profound and revolutionary, in the full sense of the word, perevorot [revolution, turnabout, upheaval] in military affairs is occurring in our time...." In his 1985 post-transfer book--History Teaches Vigilance, hereafter cited as History -- he stressed that this "profound and revolutionary, in the full sense of the word, perevorot is continuing in our time.... In July 1986, General Secretary M. S. Gorbachev in turn defined his program of "re-structuring" as a "revolution," while Chief of the General Staff Akhromeyev confirmed in February 1987 that this "re-structuring" also involves the Soviet Armed Forces.

According to Soviet military writers, the changes in doctrine that constitute the new revolution in Soviet military affairs were generated by evolving technological developments in both nuclear and conventional arms. A review of Soviet military literature in the 1980s moreover provides evidence that changes in strategy, operational art, and tactics have in turn generated changes in force structure and weapons modernization that indicate a downgrading of nuclear contingencies and a preference for conventional warfare. Especially in light of Gorbachev's repeated admissions that the present level of Soviet defense

revolution in Soviet military affairs implies a genuine Soviet incentive to pursue arms control agreements with the United States.

The Tula Principles

A ground-breaking change since the heyday of Marshal

V. D. Sokolovskiy, the Soviet shift away from nuclear contingencies and toward a conventional option has perhaps emerged most tangibly since

L. I. Brezhnev's 1977 address at Tula. Here Brezhnev affirmed that the Soviet Union was not striving for military superiority with the aim of delivering a first strike. "First strike" was understood in the Western sense: a unilateral damage-limiting capacity in nuclear war, achieved through some combination of offensive means and active and passive defensive means (ABM, counterforce against land and sea, civil defense). Soviet military thought had now concluded that neither side could achieve a unilateral damage-limiting capability; defense of the population against the inevitable retaliatory strike was unattainable, both technologically and financially.

By denying the possibility of achieving a first-strike capability, defined as a unilateral damage-limiting capacity, Brezhnev had cut the line running from 1965 to 1976 on the possibility of developing a means of defense against nuclear weapons. In Marxist-Leninist terms, this possibility is determined by the dialectical law of unity and struggle of opposites, or the dialectic of arms development.

This dialectic, the process wherein every means of attack generates a new means of defense (and vice versa), has proved crucial in shaping long-term Soviet force development programs. From 1965 to 1976, the proponents of nuclear force development held center stage precisely because of the open-ended nature of the dialectic of arms development. While they were prepared to concede that all-out nuclear war would result in unacceptable damage in present-day conditions, they deemed it indisputable that means and methods of active and passive defense against these weapons and their carriers would be perfected.

Colonel Ye. Rybkin clarified the premise in a 1965 article in

Kommunist of the Armed Forces: "There is a possibility of developing
and creating new means of waging war, which are capable of reliably
parrying an opponent's nuclear strikes." In his 1976 book, Colonel

V. M. Bondarenko was even more explicit: "Granted the potential
opponents do have the weapons for mutual destruction, then the side that
first manages to create a means of defense against them will acquire a
decisive advantage. The history of military-technological development
is replete with examples wherein weapons that seemed irresistible have,
within a certain time, been countered by sufficiently effective means of
defense...."

At Tula, however, Brezhnev pronounced the impossibility of either side's attaining military superiority, or limiting damage in an all-out nuclear war to acceptable levels, and thus pronounced the impossibility of either side's developing Bondarenko's "sufficiently effective means of defense." As V. I. Zamkovoi explained in his 1981 book, "the

historical struggle...between weapons of attack and weapons of defense will apparently be tilted in the future in favor of weapons of attack. Under these circumstances, the very idea of achieving military superiority...becomes absurd.... The ineluctable development of nuclear weapons has led to their beginning, in a certain sense, to negate themselves...." The essence of Tula--a downgrading of all nuclear options--is explicitly reflected in changing Soviet doctrine on "Mutual Assured Destruction" (MAD), nuclear war as an instrument of Soviet policy, the escalation potential of a future war, and the type of weaponry projected for that war.

Changing Soviet Doctrine

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When Brezhnev rejected at Tula the possibility of a damagelimiting capacity in nuclear war, the Soviet politico-military

leadership formed a consensus on the reality of MAD in present-day

conditions. G. Gerasimov explicitly confirmed the Soviet acceptance of

MAD in 1983: "then, as now, both sides in the nuclear confrontation

possessed an assured capability to inflict an annihilating retaliatory

strike on the aggressor (the Soviet formula), or to inflict

'unacceptable damage' on the attacking party as long as the situation

for 'mutual assured destruction' exists (the American formula)." In his

1984 interview in Red Star, Marshal Ogarkov asserted that "with the

quantity and diversity of nuclear-missile means achieved, it is already

impossible to destroy them [the opponent's nuclear-missile means] with

one strike. An annihilating retaliatory strike on an aggressor with

even a limited number of the nuclear warheads left to a defender, a strike inflicting unacceptable damage, is inevitable in present-day conditions."

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While the Soviets have not been slavish in adopting American terminology for MAD, they have developed other formulas that are at least equivalent and perhaps even stronger than MAD: "extinction of world civilization" and "amnihilation of mankind." These formulas have been echoed with consistency since Tula by the top political and military leaders, in officially sanctioned publications designated for internal audiences. In 1980, L. I. Brezhnev announced that "[i]t has now come to the point where, if the weapons presently stockpiled are put into action, mankind would be completely annihilated." In his political report to the 27th Party Congress in February 1986, General Secretary Gorbachev likewise warned that nuclear weapons could wipe humanity from the face of the earth.

Soviet military writers have explicitly linked the reality of MAD to a "U.S." preference for conventional warfare. (Here it should be noted that Soviet writers often exploit "U.S." doctrine as a foil for present and projected Soviet doctrine.) Writing in Kommunist in early 1985, Marshal Akhromeyev observed that "the inevitability of a retaliatory nuclear strike and its catastrophic consequences" have convinced the West to concentrate on developing conventional weapons that are characterized by greater yield, range, and accuracy. In his 1985 article in the Military-Historical Journal, Colonel-General Gareyev wrote that "the upgrading and stockpiling of nuclear-missile weapons

have reached a point where their mass use in war could issue in catastrophic consequences for both sides." Under these conditions, he continued, the West plans to wage a relatively long war with precision conventional means. Gareyev has also published the first official requiem for the seemingly indestructible V. D. Sokolovskiy. In his 1985 book on M. V. Frunze, he argued that Sokolovskiy's classic Military Strategy was generally valid for its time, "given the appearance of nuclear-missile weapons," but that many of its central propositions have now become obsolete.

As a result of the reality of MAD, post-Tula Soviet doctrine holds that nuclear war has lost its utility as an instrument of Soviet policy. In a 1985 post-summit report in Pravda, M. S. Gorbachev stated that by its nature, "nuclear war cannot help to achieve any kind of rational objectives." In both his 1984 article in Kommunist of the Armed Forces and the 1985 History, Ogarkov wrote that "[t]he appearance in 1945 and rapid subsequent development of nuclear weapons, with their unbelievable destructive force, have posed anew the question of the expediency of war as a means of achieving political objectives....Only having ultimately lost all reason can one try to find such arguments, and define such an objective, that would justify the unleashing of a world nuclear war, thereby threatening human civilization with its total annihilation."

According to Soviet military thought, one of the "specific features" of a future war is its escalation potential. Since J. I. Brezhnev's address at the 26th Party Congress in early 1981, Soviet

political and military elites have consistently stressed the impossibility of keeping a nuclear war limited. As recently as October 1986, M. S. Gorbachev confirmed that regardless of where it begins, a nuclear war will involve everyone and everything. Among Soviet military men, Marshal Ogarkov has used some of the strongest language possible to express the inadmissibility of a limited nuclear war. In his 1985 History, Ogarkov wrote that in the opinion of the Pentagon, the possession by the United States of powerful strategic nuclear forces, as well as the creation of the so-called Eurostrategic nuclear forces, allegedly enhance its potential for achieving political and military objectives in a limited nuclear war in the European theater of war without its escalating into a world war: "Hoping for this is of course sheer fantasy," he declared. "Any attempt to put nuclear wespons into action will inevitably end in a catastrophe that can call into question the fate of life itself on the whole earth."

In contrast to their strong language regarding the escalation potential of limited nuclear war, the Soviet military has consistently depicted conventional war as more stable. In a 1979 volume of the Soviet Military Encyclopedia, Marshal Ogarkov advised that "Soviet military strategy assumes that a world war may be started and conducted for a certain period of time with conventional weapons alone. But the expansion of military action could lead to its escalation to a general nuclear war, waged primarily with strategic nuclear weapons." The verbiage applied to the escalation potential of conventional warfare is bland indeed: "could" lead to escalation implies that it also might

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not. The 1985 History reiterates his position: a war begun with the use of conventional weapons "could escalate" to a war with the use of nuclear weapons.

Writing in the Military-Historical Journal in 1986, General-Lieutenant Aleksandrov explained that the late 1970s and early 1980s were characterized by new conditions that led to a fine-tuning of the concepts of "general" and "limited" war. "General" war now meant an armed conflict between the superpowers and their blocs in which all of the resources of the belligerents are used, and which threatens their very existence as states. "Limited" war now meant an armed conflict between two or more countries that does not become "general." But in a 1986 article in Foreign Military Review entitled "Conducting Operations Using Conventional Weapons, " Lieutenant-Colonel V. Sidorov became even more explicit. Until recently, he wrote, the United States and NATO viewed a limited [nuclear or conventional] var in Europe as a stage in a conflict that would escalate to general [nuclear] war. Now the West has adopted a new strategy, one that recognizes the possibility of conducting a limited [conventional] war against the Warsaw Pact as an independent kind of warfare. As the culmination of post-Tula shifts in doctrine on nuclear and conventional war, an independent conventional war that excludes the nuclear forces of the superpowers may well be the essence of the new revolution in Soviet military affairs.

In Soviet military thought, another "specific feature" of a future war is the type of weaponry that will be employed in it. A growing body of evidence indicates that in 1977, coincidentally with Tula and

Ogarkov's elevation to Chief of the General Staff, the Soviets adopte an independent conventional war option as a long-term militarry development goal. One form of evidence comes from Soviet writers themselvas, and especially from their perceptions of the growing conventional threat from the West. According to Marshal Ogarkov, U.S. plans for a future war have included both nuclear and conventional scenarios. But Ogarkov has consistently depicted the United States a moving toward a greater reliance on conventional weapons and options, especially in terms of the duration and scope of future combat action In his 1979 encyclopedia entry, he wrote that the United States entertained the possibility of protracted military action with the us of only conventional weapons. But in the 1982 Always, he pointed to U.S. capebility for waging a war with the use of only conventional weapons not only in Europe, but also "in the Near, Middle, and Far Ea and all sea and ocean theaters of military action." In the 1985 Mistory, Ogarkov repeated this scenario and also introduced a new U.S capebility to wage a protracted conventional war in any area of the world that posed a threat to its vital interests. The top Soviet military figures have explicitly echoed Ogarkov's perception of an increasing U.S. reliance on conventional wapons and options. In addition, the Soviet military leadership states clearly that Soviet strategy and force developments have changed accordingly. Ogarkov's elevation to Chief of the General Staff, the Soviets adopted conventional threat from the West. According to Marshal Ogarkov, U.S. scenarios. But Ogarkov has consistently depicted the United States as especially in terms of the duration and scope of future combat action. entertained the possibility of protracted military action with the use of only conventional weapons. But in the 1982 Always, he pointed to a weapons not only in Europe, but also "in the Near, Middle, and Far East, History, Ogarkov repeated this scenario and also introduced a new U.S.

Technology as Causal Agent

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Since Tula, numerous Soviet spokesmen have explained the diminishing military utility of nuclear war in terms of evolving technological developments. In both his 1982 Always and 1985 History, Marshal Ogarkov traced the new revolution to the rapid quantitative growth in nuclear weapons and delivery vehicles. Quantitative changes in nuclear weapons, wrote Colonel L. Semeyko in a 1986 Red Star article, have led to an uprecedented phenomenon: "the potential for the repeated destruction of each of the sides."

Marshal Ogarkov's recurrent discussions of the law of passage from quantitative to qualitative changes clearly reflect the evolving technological developments that have generated a new Soviet doctrine on nuclear war. In his 1978 Kommunist article, he noted that the rapid quantitative growth of nuclear-missile weapons has led to "a break in previous views on the methods of conducting engagements, operations, and armed combat in general." He connects this "break" with the creation of the strategic nuclear forces, which for the first time in the entire history of wars permits the strategic leadership "to immediately deliver a powerful retaliatory strike on an aggressor in any area of the world."

The 1982 Always essentially repeats the 1978 discussion, although the impact of nuclear weapons on military theory and practice is perceived as more pervasive. In the mid-1950s, he writes, when nuclear weapons were few and their primary delivery vehicles were aircraft, they were viewed only as a means of sharply increasing the firepower of troops. The new weapons were therefore adapted to existing forms and

methods of military action (above all strategic), and the troops retained their leading role in the accomplishment of combat tasks directly on the field of battle. The rapid quantitative growth of nuclear weapons and creation of intercontinental delivery means led subsequently to "a fundamental reassessment of the role of these weapons, to a break in previous views on the...importance of each branch of the Armed Forces in war, and on the methods for conducting engagements, operations, and war in general."

But in his 1985 History, Ogarkov writes that throughout the 1950s and 1960s, nuclear weapons were few and viewed only as a means of supplementing the firepower of troops. Here it should be recalled that the 1960s belonged to Sokolovskiy. In the 1970s and 1980s, however, the rapid quantitative growth of nuclear weapons had led to "a fundamental reassessment of the role of these weapons, and to a break in previous views on their place and importance in war, on the methods of conducting engagements and operations, and even on the possibility of waging war at all with the use of nuclear weapons." Soviet military thought has perhaps not offered a stronger statement on the diminishing military utility of nuclear weapons. Ogarkov has further stressed that the quantitative growth in nuclear weapons led to the reality of MAD that in turn neutralized nuclear weapons. In the 1985 History, he went so far as to argue that technological developments have placed nuclear weapons beyond the law of unity and struggle of opposites, beyond the dialectic

of arms development. In Marxist-Leninist terms, nuclear means of attack and defense have negated each other: the earlier struggle of opposites has been replaced by an impasse.

Throughout the 1980s, leading Soviet military thinkers have also traced the new focus on conventional war to evolving technological developments. Marshal Ogarkov and Colonel-General Gareyev have specifically linked the new revolution to the qualitatively new combat characteristics of conventional means. Along with Ogarkov, the most prominent Soviet military figures have focused increasingly on the new conventional means earmarked for the Air-Land Battle. Especially in this context, numerous Soviet military thinkers have equated the combat characteristics of the new precision means with those of both tactical and unspecified nuclear weapons.

While numerous spokesmen have asserted somewhat vaguely that the new conventional weapons can strike targets "throughout the depth" of the Warsaw Pact countries, some writers have specified those depths: operational, operational-strategic, and strategic. Other Soviet military spokesmen have specifically stressed the similarity in ranges of nuclear and precision conventional means. Marshal Ogarkov asserted in his 1984 Red Star article that the ever-expanding range of conventional means facilitates simultaneous strikes throughout the depth of an entire country, a phenomenon not possible in past wars. In a 1985 article in the Military-Historical Journal, General-Lieutenant A. I. Yevseyev likewise wrote that the conventional means earmarked for the Air-Land Battle facilitate decisive combat action to the depth of an

entire country at once. Finally, Ogarkov stated in 1984 that rapid changes in the development of conventional weapons are making many weapons "global," or capable of covering the same distances as intercontinental nuclear weapons.

Numerous Soviet military spokesmen have also equated the target sets of nuclear and precision conventional weapons. In general, they charge that NATO plans to use the new conventional means not only against troop groupings, command-and-control points, airfields, and communications networks of the Warsaw Pact countries, but also against the nuclear-missile means of the Soviet Union, to include SS-20s at their launch sites. Some Soviet military writers specify the types of precision conventional weapons that will be used against certain targets. Writing in Red Star in 1984, General-Major Gontar' noted that ballistic missiles and air-, ground-, and-sea-launched cruise missiles armed with conventional warheads will be used against command-and-control points, communications systems, nuclear-missile means, mobile armored objectives, and nuclear targets of the Soviet Union.

In addition, Soviet military writers have repeatedly stressed that precision conventional means offer certain advantages over other weapons when accomplishing their tasks. Writing in Red Star in early 1986,

V. Kuznetsov argued that 1) using precision conventional weapons will avoid the political complications associated with nuclear weapons use;

2) these conventional means can accomplish their tasks without radioactive contamination of the ground, and thus present no risk to one's own troops at the front; and 3) precision weapons do not require

bracketing, which greatly facilitates the achievement of surprise in combat action. As a later section will demonstrate, however, military writers who extol the new conventional means also acknowledge the disadvantages inherent in their use.

Consequences of the New Revolution

The immediate consequences of changing Soviet doctrine on nuclear and conventional wars may include a new role for both nuclear and conventional arms. Throughout the 1980s, numerous Soviet military thinkers have described a diminishing role for nuclear forces in modern war. Virtually all Soviet analysts of modern NATO strategy conclude that the West now plans to achieve its basic objectives in a war against the Warsaw Pact without recourse to nuclear weapons. In his 1985 History, Ogarkov described a new role for U.S. strategic nuclear forces: the United States plans to achieve its objectives in a European war by using its strategic nuclear forces "only as a potential threat." In a European war, wrote Colonel V. Alekseyev in a 1986 Red Star article, NATO plans to achieve its objectives "under the umbrellas" of both the Eurostrategic and U.S. strategic nuclear forces. From Ogarkov's use of the strategic nuclear forces "only as a potential threat." to Alekseyev's Eurostrategic and strategic nuclear "umbrellas," the Soviets appear to view intrawar deterrence as the main role for nuclear forces in present-day conditions. Or, as Red Star put it in 1984: "Modern conceptions of a non-nuclear war envisage reconciling the attainment of strategic results using conventional weapons with the readiness to repel a nuclear attack."

At the same time, the Soviet military appears to have elevated the importance of conventional weapons in modern war. In his 1985 History, Ogarkov published a new and revised description of the modern theater operation, in which the new conventional means can "directly and decisively influence the course and outcome of a war." Writing in the Military-Historical Journal in 1985, General-Lieutenant A. I. Yevseyev announced that "the main content of the [war's] initial period can be the delivery by the belligerents of nuclear strikes or strikes with conventional means of destruction...for achieving the war's main objectives." In altering sacred Soviet formulas, both of these writers made statements unprecedented in Soviet military thought: they ascribed to conventional weapons a potential heretofore reserved to only nuclear weapons. Numerous Soviet military writers also acknowledge that the new conventional means can now accomplish all of the tasks formerly reserved to only nuclear weapons.

Western analysts are in turn documenting more and more changes in Soviet hardware that point to a new revolution in the sphere of conventional weaponry. By the time Marshal Ogarkov had published his revised description of the modern theater operation, the Soviets had already deployed a new generation of precision, enhanced-range, dual-capable SRBMs in the Central European TVD. As Dennis Gormley noted in Orbis in late 1985, improvements in missile accuracy and conventional warhead effectiveness of these SRBMs "foreshadow the capacity to furnish conventional solutions for nuclear problems" in a future war.

International Defense Review reported in 1984 that at least some of

these missiles are already deployed with conventional payloads. The 1986 edition of Soviet Military Power confirms that with conventional warheads and guidance systems, Soviet long-range cruise missiles such as the SS-NX-24 "would pose a significant non-nuclear threat to U.S. and Eurasian airfields and nuclear weapons." Advances in warhead capabilities, accuracy, and reliability are likewise expected in the Soviet SRBM force. Combined-arms commanders would then have "enhanced non-nuclear targeting options, and more flexible and survivable SRBMs." The new generation of Soviet SRINF missiles can likewise be employed effectively with conventional warheads, which will give the Soviets "a formidable conventional deep-strike system."

Implications for Arms Control

The present study has provided evidence of a Soviet consensus on the diminishing military utility of nuclear weapons in present-day conditions. Since his elevation to General Secretary in March 1985, M.S. Gorbachev has reaffirmed this consensus in political terms: the nuclear age dictates new political thinking because war now threatens the extinction of humanity. In May 1985, he asserted that today it is impossible to resolve the historic competition between the two systems with military means. Even the security of Europe, he added in October 1985, cannot be ensured with military means. In his February, 1986 report to the 27th Party Congress, Gorbachev concluded that the nature of modern weapons prevents any state from ensuring its security with only military-technical means: national security is now a political

task, and can only be accomplished by political means. In a 1984 article in Kommunist of the Armed Forces, Marshal Ogarkov explained that the military-technical developments of the present have created "objective conditions" that dictate the elimination of wars as a sociopolitical phenomenon, and above all nuclear wars with their threat of annihilation for world civilization. At the 27th Party Congress, Gorbachev agreed that the two sides are now at the mercy of military-technical developments, which have created "objective conditions" that dictate an exclusively peaceful competition between them.

A review of post-Tula Soviet military literature also reveals that the Soviet military appears to view intrawar deterrence as the main role for nuclear weapons in present-day conditions. This consensus is likewise reflected in Gorbachev's political context. He has pointed repeatedly to the redundancy inherent in existing levels of nuclear weapons. We are convinced, he asserted in late 1985, that the level of weapons required for strategic "sufficiency" [deterrence] is far less than that now existing between the United States and the Soviet Union. The present levels of nuclear weapons now ensure "equal danger," he noted at the 27th Congress. But a continuing race in nuclear arms will inevitably raise this danger to the point where even parity will cease to ensure deterrence. Gorbachev's sweeping arms control proposals thus converge at the U.S.-Soviet nuclear arsenals. He offers not only a stunning flexibility in the implementation of his agenda, but also a long-awaited accord on verification measures.

Some Western analysts question whether or not the Gorbachev proposals would enhance the prospects for conventional warfare. While Soviet writers repeatedly discuss the advantages of precision conventional means, they have also argued that their very effectiveness would erase the boundary between nuclear and conventional wars. Even Marshal Ogarkov warned in a 1983 Red Star article that "new means of armed combat are capable of rapidly destroying all life over enormous areas even in a non-nuclear war.... Among others, General-Major V. Makarevskiy and Andrei Kokoshin observe that the similar combat characteristics of nuclear and precision conventional weapons would compel any rational commander to assume a "worst case" scenario and respond accordingly. These similarities pose serious obstacles to verification measures and conventional arms control in general. In addition, the new conventional means can strike the opponent's nuclearmissile means at their launch sites, a potential that clearly invites preemption.

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The Soviet military also stresses that the United States has fashioned its precision conventional arsenal for a surprise attack on the Warsaw Pact, and that such a capability is already quite mature. Writing in 1984 in Foreign Military Review, General-Major Slobodenko warned that the United States already possesses some of the new smart weapons needed for the Air-Land Battle, and that others would become available in two or three years. In fact the Soviets probably view conventional high-tech means as more of a threat than a promise: if before they felt confident of their conventional capabilities, a Western

lead in emerging technologies would offset or even negate their longterm investments. The January, 1986 Gorbachev proposals for conventional arms control thus include a ban on the creation of "nonnuclear weapons based on new physical principles, which approximate nuclear or other mass-destruction means in their destructive capabilities."

In July 1986, the Political Consultative Committee of the Warsaw Pact proposed an agenda for conventional arms control similar in breadth and timing to Gorbachev's nuclear agenda. Within the first two years, the blocs would reduce their ground troops by 100-150,000 men on each side. Immediately thereafter, both sides would proceed with further reductions until, by the early 1990s, the ground troops and tactical strike aircraft of the sides had declined by 25 percent. The Warsaw Pact agenda also echoes the Gorbachev nuclear agenda in its openness on verification measures.

Since his elevation to General Secretary, Gorbachev has repeatedly linked the success of his "re-structuring" program with the release of economic resources inherent in arms control agreements. The Soviet Union needs peace, he asserted as early as 1984, in order to achieve its revolutionary socio-economic objectives. In April 1986, he acknowledged that the country has no financial resources to spare--primarily due to the allocations required for its defense needs. Owing to our economic concerns, he continued in September 1986, we would welcome any opportunity to divert economic resources from defense to the civilian sector. Western analysts note that a nuclear arms control agreement

would yield a "cost-avoidance" effect for the Soviets. By specifying the threat posed by U.S. nuclear forces over time, the acquisition of some costly Soviet programs designed to counter a "worst case" scenario would prove unnecessary. A nuclear arms control treaty would also yield a "cost-reduction" effect by restricting planned Soviet deployments and spending. A conventional arms control agreement would lessen, in turn, the imperative to rechannel funds from nuclear into conventional programs.

Western analysts agree that Gorbachev has built his impressive nuclear and conventional arms control edifice on a triad of interdependent concerns: socio-economic, political, and military. The revolutionary goals of his socio-economic "re-structuring" dictate the diversion of scarce resources from defense to the civilian sector. When the level of "equal danger" threatens to reach the point where even strategic parity ceases to ensure deterrence, political means must replace military in the historic competition between the systems.

Pinally, military-technical developments in the present have created "objective conditions" that impose a grim but simple choice: arms control or the extinction of humanity. And the new revolution in Soviet military affairs reveals that the Soviets maintain a very healthy respect for the devastation of nuclear war.

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^{1.} CNA Professional Papers with an AD number may be obtained from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22151. Other papers are available from the Management Information Office, Center for Naval Analyses, 4401 Ford Avenue, Alexandria, Virginia 22302-0268. An index of selected publications is also available on request. The index includes a listing of professional papers, with abstracts, issued from 1969 to December 1983).

^{2.} Listings for Professional Papers issued prior to PP 407 can be found in Index of Selected Publications (through December 1983), March 1984.

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